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10/694,599	10/27/2003	Egbert Classen	ZTP01P11003	3516

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EXAMINER

ADAMS, GREGORY W

ART UNIT	PAPER NUMBER
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3652

DATE MAILED: 12/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/694,599

Applicant(s)

CLASSEN ET AL.

Examiner

Gregory W. Adams

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Referring to claim 3, line 2, and claim 19, line 3, the "base" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

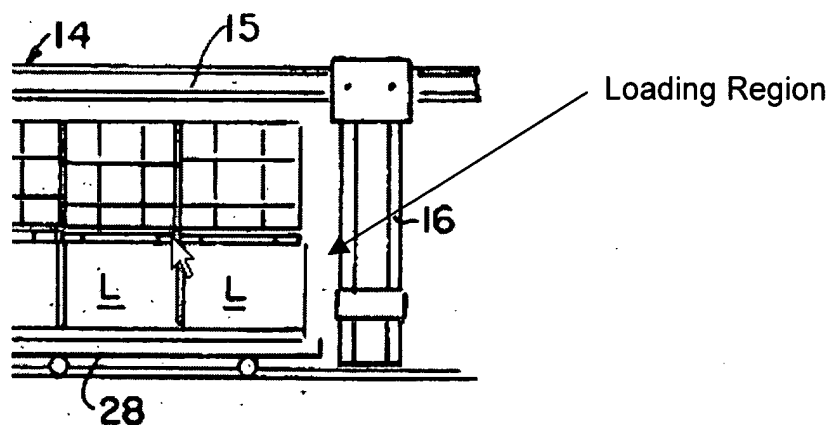
A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 5-10, 16-18, 20, and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Lemelson (US 3,788,500).

4. With respect to claim 1, referring to FIGS. 1-6 Lemelson discloses an apparatus for moving goods units L comprising a transport compartment 20 and conveying unit 14.

5. With respect to claim 2, referring to FIG. 5 Lemelson discloses a conveying unit 14 in a loading region.

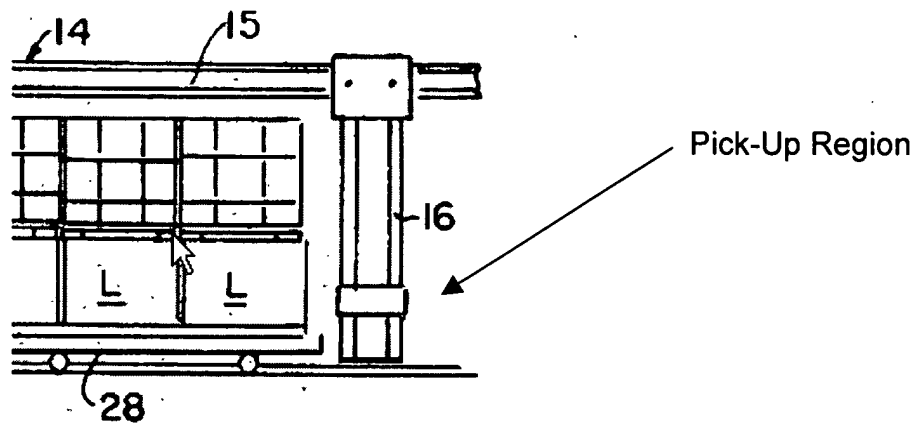


6. With respect to claim 3, referring to FIGS. 1-6 Lemelson discloses goods units L, goods units bases, conveying unit 14, conveying unit lifting unit 16, and gripping unit. It is noted that Lemelson discloses a lifting unit 16 gripping mechanism else goods units L would remain stationary.

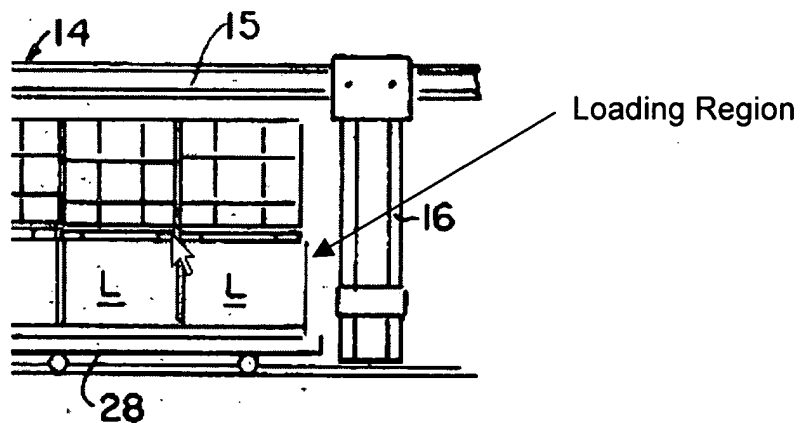
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7. With respect to claim 5, referring to FIGS. 1-6 Lemelson discloses a guide and support unit 15, and a gripping unit connected to a guide and support unit 15. It is noted that the gripping unit being attached to the lifting unit

8. With respect to claim 6, referring to FIG. 5, see below, Lemelson discloses a gripping unit pick-up region, and a guide and support unit 15 above a pick-up region.



9. With respect to claim 7, referring to FIG. 5, see below, Lemelson discloses a loading region containing a ceiling mountable conveying unit 15.



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10. With respect to claim 8, referring to FIGS. 1-6 Lemelson discloses a conveying unit 14 within a loading region, and guide and support unit 15 mountable to a building ceiling.

11. With respect to claim 9, referring to FIGS. 1-6 Lemelson discloses a gripping unit mounted on guide and support unit 15.

12. With respect to claim 10, referring to FIGS. 1-6 Lemelson discloses a guide and support unit 15, end 22, and support element 21 on end 22.

13. With respect to claim 16, referring to FIGS. 1-6 Lemelson discloses a conveying unit 14 with rollers 29.

14. With respect to claim 17, referring to FIGS. 1-6 Lemelson discloses a transport container 20 is a commercial motor vehicle.

15. With respect to claim 18, referring to FIGS. 1-6 Lemelson discloses an apparatus for at least loading and unloading goods units L to and from a transport compartment of a vehicle 20 comprising a conveying unit 14 inserted into the transport compartment 20 and conveying a plurality of goods units L.

16. With respect to claim 20, referring to FIGS. 1-6 Lemelson discloses a conveying unit 14 in loading region and rollers 29.

17. With respect to claim 30, referring to FIGS. 1-6 Lemelson discloses a method for loading and unloading a transport compartment 20 comprising providing an apparatus and a conveying unit 14, and inserting the conveying unit into the transport compartment 20, and conveying goods units L.

Claim Rejections - 35 USC § 103

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. Claims 4, 11-15, 19, 21-29, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lemelson '500 as applied to claims 1-3, 5-10, 13-24, 26-31 above, and further in view of Shimizu (US 6,814,219). As noted above, Lemelson discloses claims 1-3, 5-10, 16-18, 20, and 30.

20. With respect to claim 4, Lemelson does not disclose two gripping units. Referring to FIG. 3 Shimizu '219 discloses two gripping units 9a,9b disposed one after another to prevent damage to the goods units F to be lifted. Col. 1, ln. 27-36. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace a single gripper of Lemelson with two grippers as taught by Shimizu, such that a conveying unit may lift goods units without damage.

21. With respect to claim 11, Lemelson does not disclose two gripping units with two degrees of freedom. Referring to FIG. 3 Shimizu '219 discloses a gripping unit 9a,9b with two degrees of freedom, vertically as well as transversely with respect to a direction of loading and unloading. Shimizu teaches that this allows the goods units F to be lifted and/or released by the gripping unit 9a,9b. Col. 3, Ins. 55-65. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to

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replace the gripper of Lemelson with two grippers with two degrees of freedom as taught by Shimizu, such that a gripper may lift goods units and/or release the goods units.

22. With respect to claim 12, Lemelson does not disclose gripping units with two degrees of freedom. Referring to FIG. 3 Shimizu '219 discloses a gripping unit 9a,9b with two degrees of freedom, vertically as well as transversely with respect to a direction of loading and unloading. Shimizu teaches that this allows the goods units F to be lifted and/or released by the gripping unit 9a,9b. Col. 3, Ins. 55-65. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the gripper of Lemelson with two grippers with two degrees of freedom as taught by Shimizu, such that a gripper may lift goods units and/or release the goods units.

23. With respect to claim 13, Lemelson does not disclose transverse movement for the gripper 9a,9b. Referring to FIG. 3 Shimizu '219 discloses a gripping unit 9a,9b with transversely movement to allow the goods units F to be lifted and/or released by the gripping unit 9a,9b. Col. 3, Ins. 55-65. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide for transverse movement of the gripper of Lemelson, as per the teachings of Shimizu, such that a gripper may lift goods units and/or release the goods units.

24. With respect to claim 14, Lemelson does not disclose gripping units with one degree of freedom. Referring to FIG. 3 Shimizu '219 discloses a gripping unit 9a,9b with one degree of freedom, during loading and unloading. Shimizu teaches that this allows

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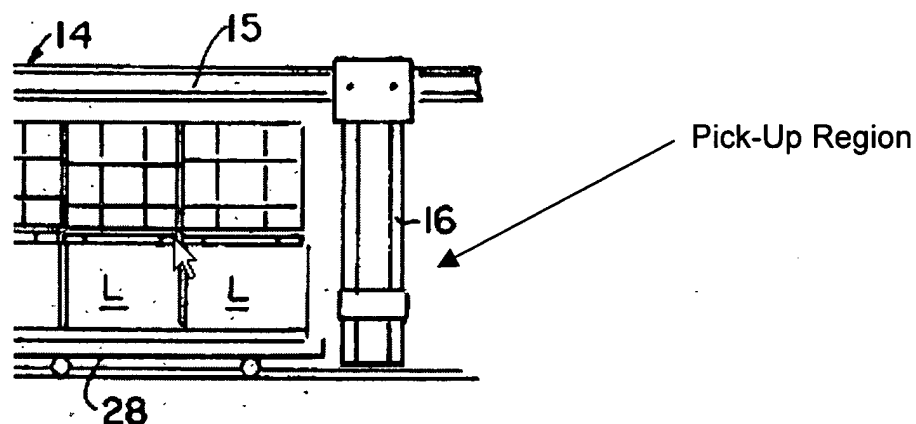
the goods units F to be lifted and/or released by the gripping unit 9a,9b. Col. 3, Ins. 55-65. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the gripper of Lemelson with the gripper taught by Shimizu, such that a gripper may lift goods units and/or release the goods units.

25. With respect to claim 15, Lemelson does not disclose gripping units with one degree of freedom. Referring to FIG. 3 Shimizu '219 discloses a gripping unit 9a,9b with one degree of freedom. Shimizu teaches that this allows the goods units F to be lifted and/or released by the gripping unit 9a,9b. Col. 3, Ins. 55-65. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the gripper of Lemelson with the gripper taught by Shimizu, such that a gripper may lift goods units and/or release the goods units.

26. With respect to claim 19, referring to FIGS. 1-6 Lemelson discloses an apparatus for loading and unloading goods units L from a transport compartment 20 comprising goods units L, goods units base, one conveying unit 14 inserted into the transport compartment 20, and a guide and support unit 15. Lemelson does not disclose 2 gripping units or 2 lifting units. Referring to FIGS. 1-10 Shimizu discloses two gripping units 9a,9b and two lifting units 2a,2b to transport the goods units F. Col. 3, Ins. 55-65. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the gripper unit and lifting unit of Lemelson with two gripping units and lifting units as taught by Shimizu, such that the goods units are transported.

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27. With respect to claim 21, referring to FIGS. 5, see below, Lemelson discloses a gripping unit with a pick-up region, and guide and support unit 15 above the pick-up region.



28. With respect to claim 22, Lemelson does not disclose a guide and support unit mounted to the ceiling. Referring to FIGS. 1-10 Shimizu discloses an overhead conveying unit 2, the guide and support unit R mounted to the ceiling or through an intermediate connection mounted to the ceiling to move goods from the ground between pick-up region and loading region. Col. 1, Ins. 27-30. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to mount the guide and support unit of Lemelson to the ceiling, as per the teachings of Shimizu, such that goods units F may move between pick-up region and loading region.

29. With respect to claim 23, Lemelson does not disclose mounting the gripping unit on the guide and support unit. Referring to FIGS. 1-10 Shimizu discloses mounting the gripping unit 9a,9b to the guide and support unit R to conveying the gripping unit 9a,9b and subsequently the goods units F. Col. 1, Ins. 27-30. Therefore, it would have been

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obvious to one of ordinary skill in the art at the time the invention was made to mount the gripping unit to the guide and support unit of Lemelson, as per the teachings of Shimizu, such that goods units F may move between pick-up region and loading region.

30. With respect to claim 24 referring to FIGS. 1-6 Lemelson discloses a guide and support unit 15, end 22, and support element 21.

31. With respect to claim 25, Lemelson does not disclose two gripping units with two degrees of freedom. Referring to FIG. 3 Shimizu '219 discloses a gripping unit 9a,9b with two degrees of freedom, vertically as well as transversely with respect to a direction of loading and unloading. Shimizu teaches that this allows the goods units F to be lifted and/or released by the gripping unit 9a,9b. Col. 3, Ins. 55-65. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the gripper of Lemelson with two grippers with two degrees of freedom as taught by Shimizu, such that a gripper may lift goods units and/or release the goods units.

32. With respect to claim 26, Lemelson does not disclose moving gripping units transversely to a loading and unloading direction over a cross member. Referring to FIGS. 1-10 Shimizu '219 discloses a cross member 2c, wherein the gripping units 9a,9b move transversely to ensure the goods units F are lifted and/or released by the gripping unit 9a,9b and moved. Col. 3, Ins. 55-65. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to move the gripping unit transverse to the loading and unloading direction across the cross member of

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Lemelson, as per the teachings of Shimizu, such that a gripper may lift goods units and/or release the goods units.

33. With respect to claim 27, Lemelson does not disclose gripping units with one degree of freedom. Referring to FIG. 3 Shimizu '219 discloses a gripping unit 9a,9b with one degree of freedom. Shimizu teaches that this allows the goods units F to be lifted and/or released by the gripping unit 9a,9b. Col. 3, Ins. 55-65. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the gripper of Lemelson with a gripper as taught by Shimizu, such that a gripper may lift goods units and/or release the goods units.

34. With respect to claim 28 referring to FIGS. 1-6 Lemelson discloses a conveying unit 14 and rollers 29.

35. With respect to claim 29, referring to FIGS. 1-6 Lemelson discloses a transport container 20 as a commercial motor vehicle.

36. With respect to claim 31, referring to FIGS. 1-6 Lemelson discloses a method of loading and unloading a transport container 20 with goods units L comprising providing a conveying unit 14, and inserting the conveying unit and a gripping unit into the transport compartment. Lemelson does not disclose two gripping units, two lifting units, a guide and support unit, and inserting the apparatus into the transport compartment. Referring to FIGS. 1-10 Shimizu '219 discloses a providing two gripping units 9a,9b one after another in the loading and unloading direction, providing two lifting units 2a,2b, connecting a guide and support unit R to gripping units 9a,9b to ensure the goods units F are lifted and/or released by the gripping unit 9a,9b and moved. Col. 3, Ins. 55-65.

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to move the gripping unit transverse to the loading and unloading direction across the cross member of Lemelson, as per the teachings of Shimizu, such that a gripper may lift goods units and/or release the goods units.

Conclusion

37. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

US 2004/0126208 to Tawyer et al. discloses a ceiling mountable overhead conveyor with grippers.

US 5,718,320 to Marquier et al. discloses a ceiling mountable overhead conveyor with lifting units, gripper units, and guide and support units.

US 5,743,702 to Gunderson and US 4,930,970 to Sunderland disclose an overhead conveyor with a lifting unit, gripper unit, that extends into a transport compartment.

US 6,758,326 to Benjamin discloses an overhead conveyor that extends comprising gripping units, lifting units, guide and support units, and rollers.

38. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory W. Adams whose telephone number is (703) 305-0555. The examiner can normally be reached on M-F, 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen D. Lillis can be reached on (703) 308-3248. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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